NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

FISHPOND MANAGEMENT

(Ac.)

CODE 399

DEFINITION

Managing impounded water for the production of fish or other aquatic organisms.

PURPOSE

- To provide favorable habitat for fish and other aquatic organisms.
- To develop and maintain a desired species composition and ratio.
- To develop and maintain a desired level of production.

CONDITIONS WHERE PRACTICE APPLIES

In warm and cold water ponds, lakes and reservoirs not managed for commercial aquaculture purposes.

CRITERIA

General Criteria Applicable To All Purposes

Structures will meet or exceed the requirements of the appropriate National Standard; i.e., a constructed pond will meet or exceed the requirements of Pond (378).

Implement State Aquatic Nuisance Species Management Plan recommendations.

Protect the site from flooding, sedimentation and contamination.

Control undesirable aquatic vegetation.

Criteria To Develop And Maintain A Desired Species Composition And Ratio

Limit species for stocking to those that are adapted for use in ponds, lakes or reservoirs in Idaho.

Species selection(s) and stocking rates shall follow a pond management plan developed with the client and in accordance with Idaho Department of Fish and Game policy and guidelines.

Develop species(s) selection and stocking rates with respect to the size, depth, water temperature and water quality of the area to be stocked.

Criteria To Develop And Maintain A Desired Level Of Production

The desired level of production shall be maintained through liming, fertilization, slot limits, harvesting or supplemental feeding. Desired water quality conditions (e.g. dissolved oxygen level, pH, alkalinity, etc.) reflect local conditions and should be addressed in the pond management plan.

Aquatic organism health issues directly affect production levels and need to be included in the pond management plan. Proper diagnostic sampling procedures should be followed during fish kills and when submitting samples to diagnostic labs.

CONSIDERATIONS

Consider the use of native species whenever possible.

Consider alternatives to the use of pesticides in the drainage area above the site which may have negative impacts to water quality and aquatic organisms.

Consider the use of erosion control and nutrient and pest management practices in the watershed to maintain water quality.

Consider the effect of additional uses (e.g. livestock watering, recreation, irrigation, etc.) on the fish and/or aquatic organism population.

Consider the use of appropriate water treatment practices below structures to ensure that discharges from ponds, lakes and reservoirs will meet state water quality standards.

Consider methods to prevent the fish in the pond, lake or reservoir from escaping or being introduced into adjoining waters where native species might be adversely affected.

Consider providing additional fish and wildlife habitat within or around the impoundment for cover and breeding purposes. Grassy cover around the impoundment that may provide nesting habitat should not be mowed until after the primary nesting season.

PLANS AND SPECIFICATIONS

A pond management plan will be prepared using approved specification sheets, job sheets, technical notes, narrative statements in the conservation plan or other documentation.

The plan will include:

- A location map and plan view of the site.
- Statement of purpose that describes the species(s) desired and management goals.
- Evaluation methods (observation, seining, electroshocking, catch record, etc.) for determining the population dynamics of fish and other aquatic organisms.
- Reference to State Aquatic Nuisance Species Management Plan recommendations, if applicable.
- Permit requirements and regulations.

OPERATION AND MAINTENANCE

Develop an Operation and Maintenance plan that includes the following actions which are required for the successful management of the pond, lake or reservoir:

1. Evaluation of habitat conditions on a regular basis;
2. Management of fish or other aquatic organism populations;
3. Supplemental feeding where applicable;
4. Removal of undesirable and overpopulated organisms;
5. Management and control of aquatic vegetation;
6. Application of fertilizer and lime;
7. Monitoring and maintenance of desired water quality conditions (e.g. dissolved oxygen level, pH, alkalinity, etc.);
8. Periodic inspection and maintenance of structural components (e.g. water level control equipment); and
9. Detection and identification of fish pathogens and instructions for collecting and preserving samples.

REFERENCES

A Manual of Fish Culture. 1999. Fish Culture Section, American Fisheries Society.

Inland Fisheries Management in North America, Second Edition. 1999. Chapter 21, Small Impoundments. Kohler, C.C. and W.A. Hubert, editors. American Fisheries Society.

Natural Resources Conservation Service (NRCS). 1982. Biology Technical Notes 7, 12, 14. Boise, ID.

Suggested Procedures for the Detection and Identification of Certain Finfish and Shellfish Pathogens (Blue Book). 2004. Fish Health Section, American Fisheries Society.